| Location | Date | Time Local/ Standard | Path Length (Miles) | Path Width (Yards) | Number of Persons Killed | Number of Persons Injured | Estimated Damage Property | Estimated Damage Crops | Character of Storm |
|---|---|---|---|---|---|---|---|---|---|

## ILLINOIS, Northwest

**ILZ001>002-007-009-015>018-024>026-034>035** **Jo Daviess - Stephenson - Carroll - Whiteside - Rock Island - Henry - Bureau - Putnam - Mercer - Henderson - Warren - Hancock - Mcdonough**

**01 0000CST 0 0 Drought**
**31 2359CST**

The drought that began back in June 2005 continued through January 2006 and into February 2006. Being the middle of winter the affects of the drought were essentially hydrologic in nature. A summary of the conditions for January 2006 is given by the service hydrologist.

Total precipitation for the month was 2.10 inches or 0.80 inches above normal and 161% of normal. Monthly totals and departures varied widely by location. For example, in Burlington, Iowa, the monthly total was 2.73 inches or 1.42 inches above normal and 208% of normal. In the other hand, in Dubuque, Iowa, the monthly total was 1.32 inches or 0.04 inches above normal and 103% of normal. Precipitation for most of the month was light to moderate. The exception was toward the end of the month when a storm system brought significant rainfall amounts to the HSA from the 28th-30th. Precipitation totals ranged from around 1 inch in the west to over 2 inches in the east. Because of the warm temperatures, most of the precipitation fell as rain. The majority of the rain fell on the 28th over a 24-hour period. Because most of the ground was unfrozen, the majority of this rainfall soaked into the soil, easing the drought.

Another storm system brought low to moderate precipitation amounts to the HSA on the 2nd. Again, because of the warm temperatures, the precipitation fell as rain. Amounts were greatest on the Iowa and Missouri side of the Mississippi River. Totals of 0.5 to 1.0 inches were common there. On the Illinois side, amounts of less than 0.5 inches were common.

River Conditions

Stream flows began the month with most locations reporting near normal (25th to 74th percentile) conditions. A few locations reported above normal (76th to 90th percentile) conditions and a few locations reported below normal (10th to 24th percentile) conditions. The precipitation event on the 2nd resulted in increases in stream flows especially in Iowa and Missouri. Stream flows went to above to much above normal (greater than 90th percentile) there, but were below to much below normal (less than 10th percentile) across Illinois. These conditions persisted through the 15th.

After the 15th stream flows across the entire HSA gradually became near to below normal. The flows remained this way until the 28th when significant liquid precipitation fell across the entire HSA. In response to this precipitation, stream flows became above to much above normal. Flows gradually decreased and at the end of the month they were normal to above normal.

Source: U.S. Geological Survey. Their WaterWatch Web site has an animation of daily flow percentiles for the United States (http://water.usgs.gov/cgi-bin/waterwatch_animation?200601).

Drought

For the entire HSA, the three-month precipitation total is 5.76 inches or 0.04 inches above normal and 101% of normal. The six-month precipitation total is 12.30 inches or 3.69 inches below normal and 77% of normal. The 12-month precipitation total is 23.95 inches or 12.28 inches below normal and 66% of normal.

According to the U.S. Drought Monitor maps (http://drought.unl.edu/dm/), the drought conditions for the HSA did not change much during the month. The eastern two-thirds of the HSA were in the Extreme Drought (D3) category. The western one-third of the HSA was in the Severe Drought (D2) or Moderate Drought (D1) category.

| Location | Date | Time Local/ Standard | Path Length (Miles) | Path Width (Yards) | Number of Persons Killed | Number of Persons Injured | Estimated Damage Property | Estimated Damage Crops | Character of Storm |
|---|---|---|---|---|---|---|---|---|---|

## ILLINOIS, Northwest

**ILZ025** **Henderson**

| | | | | | | |
|---|---|---|---|---|---|---|
| **20** | **1330CST** | **0** | **0** | **2.5K** | | **Winter Weather** |
| | **2030CST** | | | | | |

Also from Co-op observers

**ILZ017-026** **Bureau - Warren**

| | | | | | | |
|---|---|---|---|---|---|---|
| **20** | **1500CST** | **0** | **0** | **10K** | | **Winter Storm** |
| **21** | **0200CST** | | | | | |

Also from Co-op observers

**ILZ016-034>035** **Henry - Hancock - Mcdonough**

| | | | | | | |
|---|---|---|---|---|---|---|
| **20** | **1800CST** | **0** | **0** | **15K** | | **Ice Storm** |
| | **2200CST** | | | | | |

Also from Co-op observers

A major winter storm moved from the southern Plains into the eastern Great Lakes from 20 January to 21 January 2006. Temperatures were critical during the event with some areas remaining all snow while others began as rain and transitioned to snow. During the transition, ice in the form of sleet or freezing rain occurred. Significant amounts of ice occurred in thunderstorms across far northeast Missouri, parts of west central, northwest, and north central Illinois. The last of the thunderstorms ended across Bureau and Henry counties of Illinois at 1900 CST.

Radar data showed five distinct bands of heavier precipitation across the WFO DVN county warning area. These mesoscale bands of precipitation lead to snowfall and ice amounts varying greatly over small distances. Due to temperatures right around freezing, Lee and Des Moines counties in southeast Iowa and Henderson County in west central Illinois never received more than 0.20 inch of ice accumulation at any one time. Although not substantiated by ground truth reports, it is believed that extreme southern Warren county in west central Illinois received 0.25 inch of ice accumulation since it was in a heavier band of precipitation

Scotland and Clark counties in northeast Missouri along with McDonough and Hancock counties in west central Illinois received 0.25 inch ice accumulation followed by snowfall ranging from 0.5 to 3 inches. In Illinois, southeast Henry county and most of Bureau county received 0.25 inch ice accumulation with some areas up to 0.5 inch accumulation under the thunderstorms. Once the transition to snow was completed, co-operative observers in Bureau county received 6-8 inches of snowfall on top of the ice.

Another mesoscale band of snow deposited 4 to 6 inches of snow in a band running from Fairfield Iowa in Jefferson County to Apple River Illinois in Jo Daviess County. A co-op observer in Lowden, Iowa (Cedar County) received 7 inches of snow in just under 9 hours.

According to law enforcement, traffice accidents were most numerous in the areas that received significant ice accumulation whereas areas that received only snow reported no more than the usual amount of traffic accidents. Many schools either cancelled outright or had early dismissal before the worst of the ice accumulation began. Many trees were downed in areas that received significant ice accumulation.

## IOWA, East Central and Southeast

**IAZ042-052>054-063>068-076>078-087>089-098>099** **Dubuque - Linn - Jones - Jackson - Iowa - Johnson - Cedar - Clinton - Muscatine - Scott - Keokuk - Washington - Louisa - Jefferson - Henry - Des Moines - Van Buren - Lee**

| | | | | | | |
|---|---|---|---|---|---|---|
| **01** | **0000CST** | **0** | **0** | | | **Drought** |
| **31** | **2359CST** | | | | | |

| Location | Date | Time Local/ Standard | Path Length (Miles) | Path Width (Yards) | Number of Persons Killed | Number of Persons Injured | Estimated Damage Property | Estimated Damage Crops | Character of Storm |
|---|---|---|---|---|---|---|---|---|---|

## IOWA, East Central and Southeast

The drought that began back in July 2005 continued through January 2006 and into February 2006. Being the middle of winter the affects of the drought were essentially hydrologic in nature. A summary of the conditions for January 2006 is given by the service hydrologist.

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Source: U.S. Geological Survey. Their WaterWatch Web site has an animation of daily flow percentiles for the United States (http://water.usgs.gov/cgi-bin/waterwatch_animation?200601).

Drought

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| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **IAZ089-099** | **Des Moines - Lee** | | | | | | | | |
| | **20** | **1300CST<br>2000CST** | | | **0** | **0** | **6K** | | **Winter Weather** |
| | Also from Co-op observers | | | | | | | | |
| **IAZ065** | **Cedar** | | | | | | | | |
| | **20** | **2030CST<br>2130CST** | | | **0** | **0** | | | **Heavy Snow** |
| | From Co-op observer | | | | | | | | |

A major winter storm moved from the southern Plains into the eastern Great Lakes from 20 January to 21 January 2006. Temperatures were critical during the event with some areas remaining all snow while others began as rain and transitioned to snow. During the transition, ice in the form of sleet or freezing rain occurred. Significant amounts of ice occurred in thunderstorms across far northeast Missouri, parts of west central, northwest, and north central Illinois. The last of the thunderstorms ended across Bureau and Henry counties of Illinois at 1900 CST.

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|---|---|---|---|---|---|---|---|---|---|

## IOWA, East Central and Southeast

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According to law enforcement, traffice accidents were most numerous in the areas that received significant ice accumulation whereas areas that received only snow reported no more than the usual amount of traffic accidents. Many schools either cancelled outright or had early dismissal before the worst of the ice accumulation began. Many trees were downed in areas that received significant ice accumulation.

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **IAZ089-099** | **Des Moines - Lee** | | | | | | | | |
| | **24** | **1400CST<br>1700CST** | | | **0** | **0** | **6K** | | **Strong Wind (EG45)** |
| **IAZ077** | **Washington** | | | | | | | | |
| | **24** | **1523CST<br>1533CST** | | | **0** | **0** | | | **High Wind (MG51)** |

KAWG AWOS

A strong winter storm with an associated trop fold produced sustained winds of 26-33 knots (30-38 mph) with numerous gusts of 44-48 knots (51-55 mph) during the afternoon hours across eastern Iowa and the northern half of Illinois. The variability of the measured gusts can be attributed to differential heating during the afternoon hours. In Lee County Iowa, numerous tree limbs were downed across the county. A power pole was downed in West Point with a large tree down in Fort Madison. In southern Des Moines County about one half mile north of the Lee/Des Moines County line, the top of a 40 foot cedar tree was broken off at a residence along U.S. 61. The tree just missed hitting the residence.

## MISSOURI, Northeast

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **MOZ009>010** | **Scotland - Clark** | | | | | | | | |
| | **20** | **1600CST<br>2000CST** | | | **0** | **0** | **10K** | | **Ice Storm** |

A major winter storm moved from the southern Plains into the eastern Great Lakes from 20 January to 21 January 2006. Temperatures were critical during the event with some areas remaining all snow while others began as rain and transitioned to snow. During the transition, ice in the form of sleet or freezing rain occurred. Significant amounts of ice occurred in thunderstorms across far northeast Missouri, parts of west central, northwest, and north central Illinois. The last of the thunderstorms ended across Bureau and Henry counties of Illinois at 1900 CST.

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|---|---|---|---|---|---|---|---|---|---|

**MISSOURI, Northeast**

According to law enforcement, traffice accidents were most numerous in the areas that received significant ice accumulation whereas areas that received only snow reported no more than the usual amount of traffic accidents. Many schools either cancelled outright or had early dismissal before the worst of the ice accumulation began. Many trees were downed in areas that received significant ice accumulation.